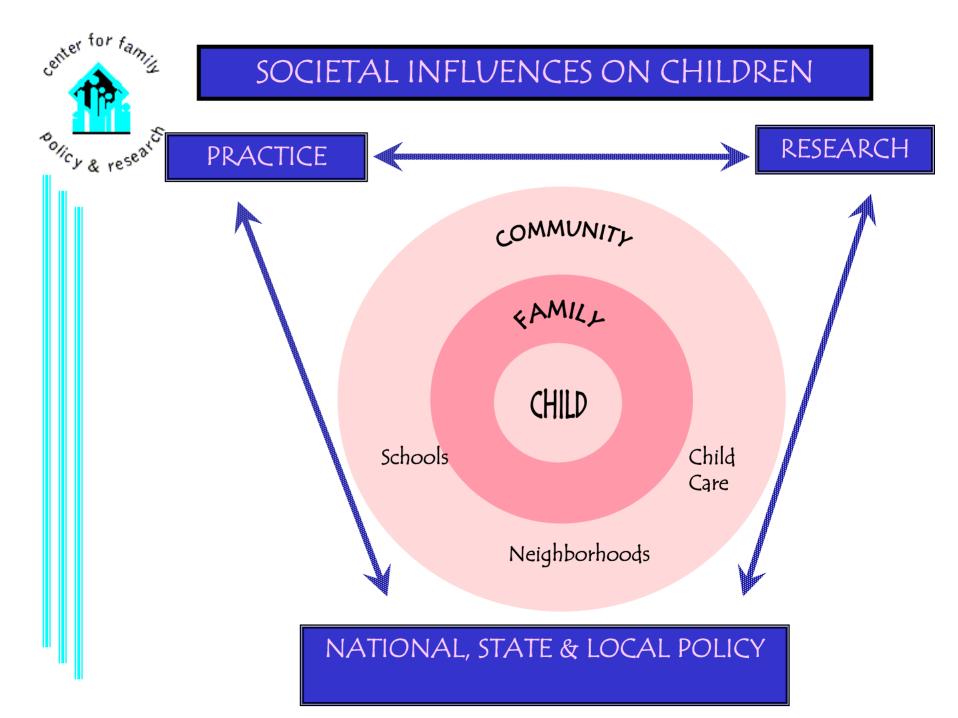


Preparing Children for Success in School

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Families

Schools

Communities



Defining Readiness

- Physical well-being and motor development
- Social and emotional development
- Approaches to learning
- Language development
- Cognition and general knowledge



What Does Research Say?

- Entering kindergartners more "ready" in reading and math:
 - -Children from higher SES families
 - -Older children
 - -White and Asian children (small advantage only in math)

ECLS-K



Home Reading Experiences

 Parents read more to girls than to boys

 Higher SES parents more likely to read to child every day (substantial)

ECLS-K



Gains During Head Start Year

- Increased receptive vocabulary (PVVT-III)
- Improved letter recognition (WJ-R)
- Better at applied math problems (WJ-R)
- More color names
- Better at counting
- Growth in social skills

FACES



The Central Early Head Start Goal

Provide low-income families with pregnant women and children under the age of 3 with a variety of child and family development services so that children will be ready for school when they turn 5. 0



The Early Head Start Philosophy

 Infants & toddlers benefit from developmentally appropriate interactions and activities.

 Children benefit indirectly when parents' needs are met.



The Early Head Start Evaluation

- Random Assignment at 17 sites.
 - ► A "program" group.
 - ➤ A "comparison" group
- Interviews, observations, tests.



Who Benefited Most?

- Children whose mothers enrolled while still pregnant.
- African American families.
- Families with a moderate number of risks.
- Families at Early Head Start sites with the highest quality services.



Some Cognitive Benefits

- On the Bayley Scales of Infant Development (a measure of cognitive functioning)
 - Higher mean scores
 - \triangleright Fewer scores in the at-risk range (< 70)
- On the Peabody Picture Vocabulary Test (a measure of language development)
 - Higher mean scores



Some Social-Emotional Benefits

More positive interactions with parents.

Fewer negative interactions with parents.

Longer sustained attention toward objects.



Benefits for Parenting

- Program group parents were rated as:
 - > Less negative.
 - **Less detached.**
 - > More emotionally supportive.
 - > Facilitating cognitive development better.
- Program group parents also
 - Read to children more often.
 - > Used more and milder disciplinary strategies.



Socioeconomic Status

Socioeconomic status is one of the strongest predictors of performance differences in children at the beginning of 1st grade.



Vocabulary

There was a difference of almost 300 words spoken per hour between professional and welfare parents.



Vocabulary

The professional families' children at age 3 had a larger recorded vocabulary than the parents on welfare.



... and they could predict with 85% accuracy those children who would be good or poor readers.



... the probability that a child will remain a poor reader at the end of the 4th grade if he or she is a poor reader at the end of the first grade is .88







At a time when scientific advances could be used to strengthen early childhood policies and practices, knowledge is frequently dismissed or ignored and our children are paying the price.

From Neurons to Neighborhoods, 2000



Young children make dramatic and intertwined gains in cognitive, linguistic, emotional, social, regulatory, and moral development during the early childhood years, and each requires focused attention.

From Neurons to Neighborhoods, 2000



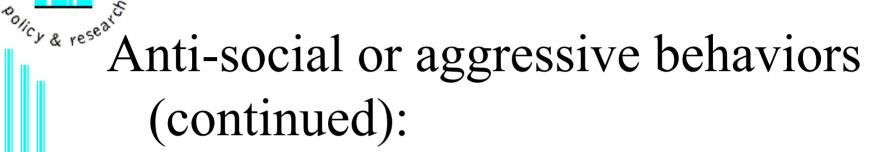
Nurturing Relationships

Significant parental mental health problems--maternal depression, substance abuse, family violence--impose heavy developmental burdens.



Children who develop anti-social or aggressive behaviors:

- Get less positive feedback from adults
- Are less likely to like school
- Attend and learn less in school



- Are more likely to be held back in school
- Are more likely to drop out of school
- Are at greater risk of engaging in delinquent acts

(Thornburg, in press)



Nurturing Relationships

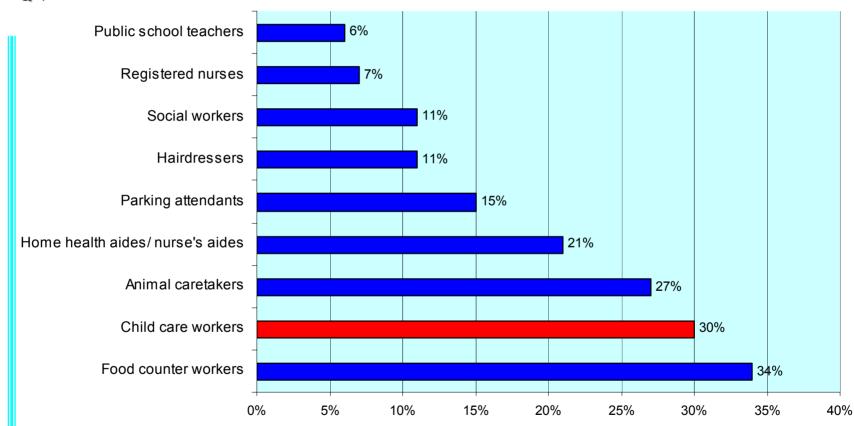
Young children who lack at least one loving and consistent adult often suffer severe and longlasting developmental difficulties.





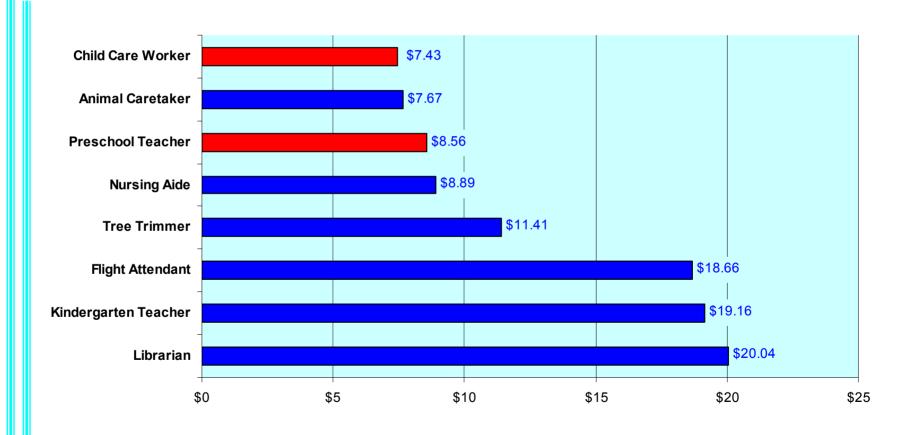


Turnover in Child Care and Other Occupations





A Comparison of Median Hourly Wages (Bureau of Labor Statistics Data 2000)





Wages Survey

(2022 teachers)

Missouri

\$15,000

Nebraska

\$14,720

Kansas

\$13,250

Iowa

\$12,410



...sustained relationships with caring teachers and caregivers can help to buffer children from the effects of problems or deprivation at home.



Quality Matters

Children who attend high-quality early childhood programs as compared to children who attend low-quality programs have:

- Better math, language/communication, reading, thinking and attention skills
- Higher IQ's
- More prosocial behaviors
- Better emotional stability



Abecedarian Preschool Project

The primary goal of the preschool phase was to enhance school readiness and, thus, to establish a better base for a successful transition into elementary school.

Ramey, et al., <u>Applied Developmental Science</u> (1999)



Abecedarian High-Risk Families Initially Characterized By:

- Poverty
- Low Maternal IQ
- Low maternal Education
- •Single Parent Families
- Teen Motherhood
- Authoritarian Child-Rearing Attitudes
- External Locus of Control



Abecedarian Preschool Program

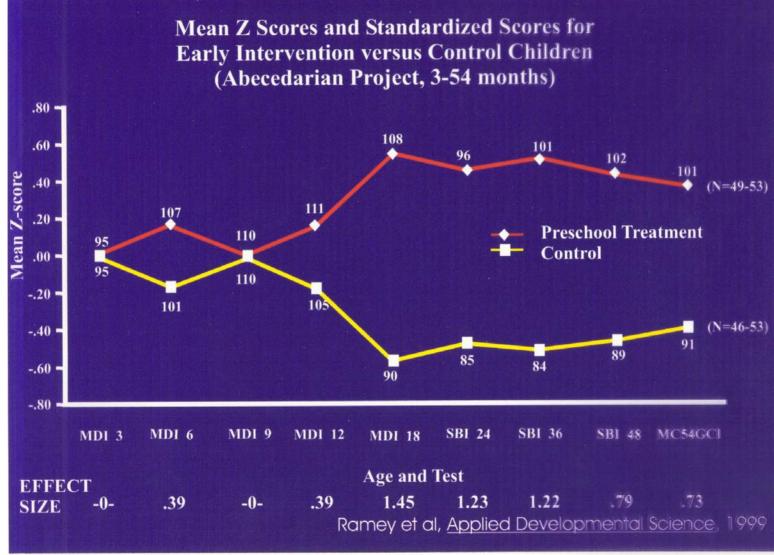
Treatment Group

- Adequate nutrition
- Supportive social services
- Free primary medical care
- Preschool treatment:
 - Intensive (full day, 5 days/week, 50 wks/yr, 5 yrs)
- "Partners for Learning" curriculum:
 - Cognitive/Fine Motor
 - Social/Self
 - Motor
 - Language
 - Individualized pace

Control Group

- Adequate nutrition
- Supportive social services
- Low-cost or free medical care







Brief Summary of Abecedarian Results During Preschool Period

Positive Effects on

- IQ performance
- Learning & cognitive performance
- Language development
- Resilience to nonoptimal biological and behavioral conditions
- Social responsiveness
- Academic locus of control
- Maternal education
- Maternal employment

No Effects on

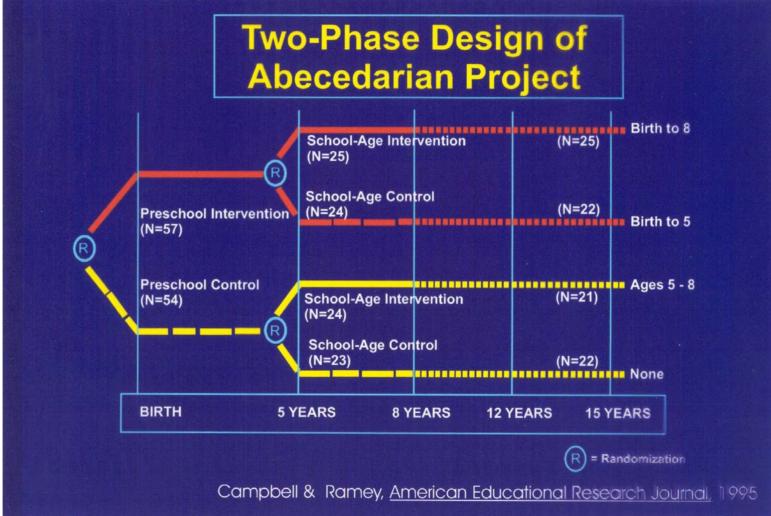
- Maternal attachment
- Parental child rearing attitudes
- Home environments

Decreased Effects

 Incidence of intellectual subnormality

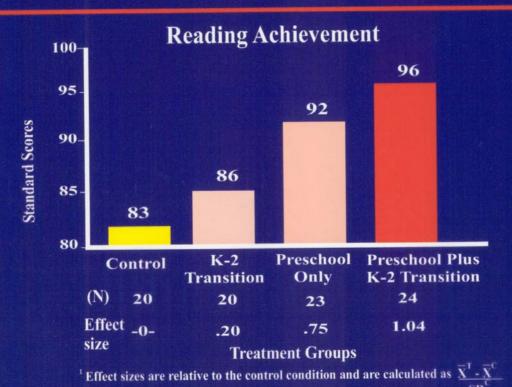
Ramey & Ramey, 1999







Abecedarian Project Woodcock-Johnson Age-referenced Reading Standard Scores at age 8

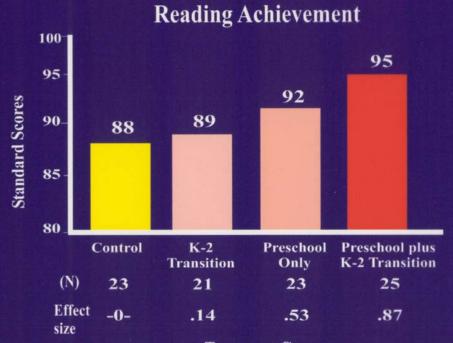


Where: X=Mean, T=Treatment condition, C=Control condition, S.D.=Standard deviation

Ramey & Campbell, in Children in Poverty, 1992



Abecedarian Project Woodcock-Johnson Age-referenced Reading Standard Scores at age 15



Treatment Groups

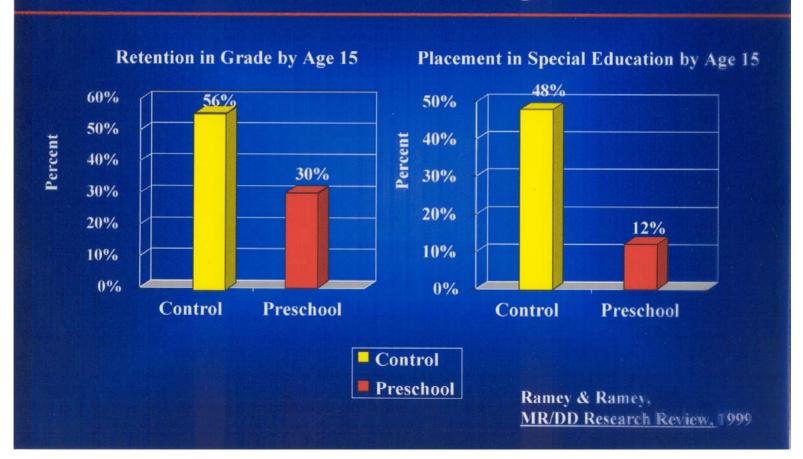
¹ Effect sizes are relative to the control condition and are calculated as $\overline{X}^T - \overline{X}^C$

Where: X=Mean, T=Treatment condition, C=Control condition, S.D.=Standard deviation

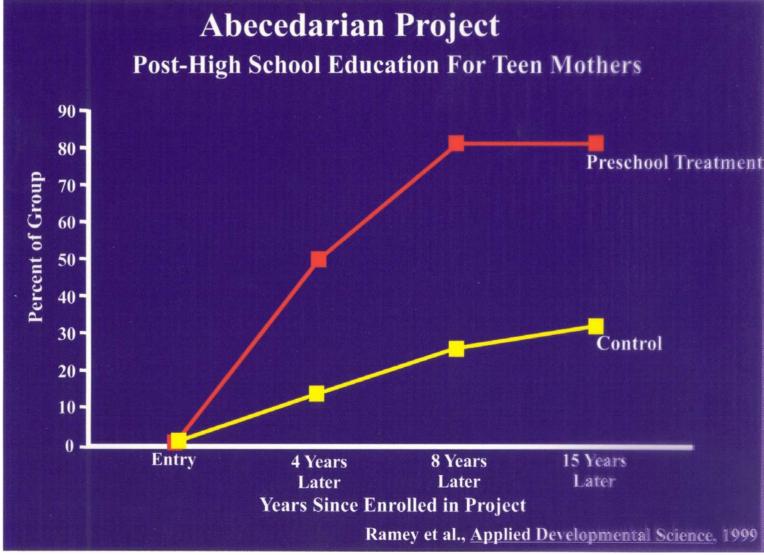
Ramey et al., Applied Developmental Science, in press.



Abecedarian Project









The quality and quantity of education is the key to the future of our way of life and education begins long before kindergarten. Let's begin a renewal of commitment to the full development of our youngest children.



Chicago Child-Parent Center Program

(Reynolds, Temple, Robertson & Mann, June 2001), 1286 Children (ages 3-9 years)

Comprehensive educational and family support services



- Preschool Participants (as compared to comparison group):
- 29% higher rate of high school completion
- 33% lower rate of juvenile arrest
- 42% reduction in arrest for violent offenses
- 41% reduction in special education placement
- 40% reduction in the rate of grade retention
- 51% reduction in child maltreatment



Cost-Benefit Analysis (1998 dollars)

1.5 years of participation-- return to society is \$47,759/child

Economic benefits of the preschool program to general public (taxpayers and crime victims), exclusive of increased earnings capacity, were \$25,771/child.



In 1998 dollars -

Higher expected earnings capacity—28%
Fewer arrests (criminal justice system)—28%
Savings on costs for crime victims—24%
Savings on school remedial services—18%

\$7.10 was returned to society for every dollar invested in high quality preschool experiences.



Most children do not attend high quality programs.

Issues/Challenges:

Is it possible to have culturally relevant standards?

As states implement pre-kindergarten initiatives, are infants and toddlers left behind in lower quality environments?

Teacher shortage? Teacher preparation?

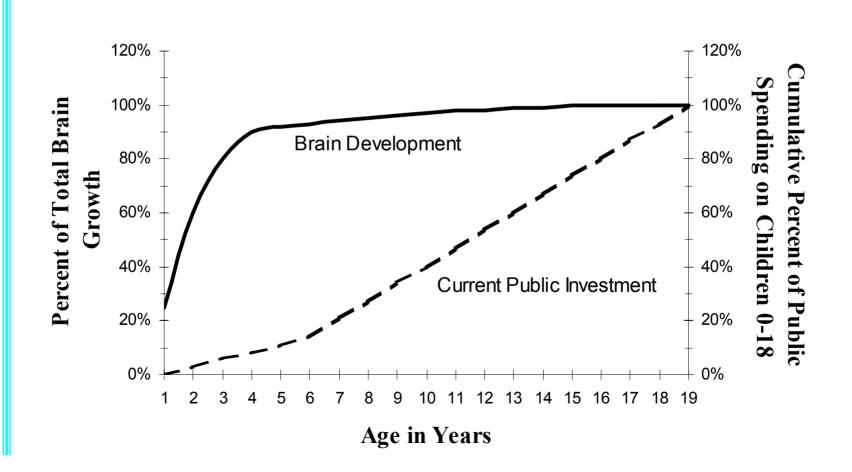


"The current early childhood system is fragmented and disorganized, lacking a shared vision or uniform standards."

Shore & Kusnetz, 2000



Brain Development vs. Public Investment



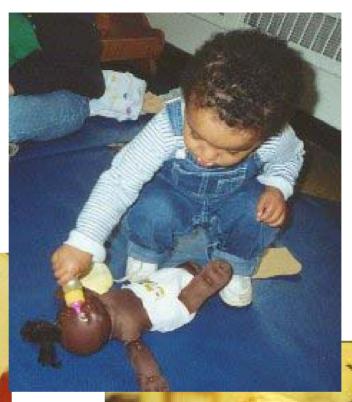


"...establish early childhood partnerships with parents, businesses, and community groups, coordinating family child care with pre-K programs and Head Start, and linking early education programs to parent education classes, support groups, job training, literacy tutoring, health screenings, crisis intervention, and family counseling."

Shore & Kusnetz, 2000











Let's remember to:

Build a system that gives equal attention to young children's social, emotional and mental health needs (equal to literacy and numeracy)

Include public health campaigns and early screening and treatment



Invest in early childhood teachers/providers:

- > Professional development
- > Compensation
- > Benefits

Make sure early childhood programs:

- Promote sustained relationships
- > Address special needs of children
- Provide safe and stimulating environments



Support families (consider cultural characteristics)

Stop blaming parents, government, businesses, communities--we need a shared vision!



OUR CHALLENGE...

"The charge to society is to blend the skepticism of a scientist, the passion of an advocate, the pragmatism of a policy maker, the creativity of a practitioner, and the devotion of a parent--and to use existing knowledge to ensure both a decent quality of life for all of our children and a productive future for the nation."

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"Our lives begin to end the day we become silent about things that matter."

Martin Luther King, Jr.

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